

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

SIEMENS MEDICAL SOLUTIONS USA, INC.,)	
)	
)	
Plaintiff,)	
)	C.A. No. 07-190 (SLR)
v.)	
)	REDACTED VERSION
SAINT-GOBAIN CERAMICS & PLASTICS, INC.,)	
)	
)	
Defendant.)	

AFFIDAVIT OF MARKUS B. LUSSER

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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

SIEMENS MEDICAL SOLUTIONS USA,
INC.,

Plaintiff,

v.

SAINT-GOBAIN CERAMICS &
PLASTICS, INC.,

Defendant.

Civil Action No. 07-190-SLR

AFFIDAVIT OF MARKUS B. LUSSER

I, Markus B. Lusser, hereby declare:

1. I am presently employed by Siemens Medical Solutions, Inc. ("Siemens Medical") as the Vice President of Global Sales and Marketing for Molecular Imaging worldwide and have been in that position since March 1, 2003. I have been employed by Siemens Medical since 1989.
2. In 2000, Siemens Medical began selling its Biograph PET/CT scanner, the first scanner product combining PET and CT imaging modalities. The scanner, developed and produced by CPS Innovations, a joint venture between Siemens Medical and CTI, was named the Invention of the Year by Time Magazine. When originally introduced, the Biograph PET/CT included a BGO scintillation crystal.

3. It is my understanding that CTI had obtained an exclusive license from Schlumberger Technology Corporation (“Schlumberger”) to make, use, sell, offer to sell and import gamma and X-ray detectors incorporating a cerium-doped lutetium oxyorthosilicate (“LSO” or “Ce:LSO”) scintillation crystal.

4. CPS revolutionized the PET field when it introduced the first commercial PET scanner to use a lutetium-based scintillation crystal, one made of LSO, in 2000. The scintillation properties of LSO were so superior to those of the prior art bismuth germanate (BGO) crystal previously used by Siemens Medical (and others in the industry), that Siemens Medical decided to replace the BGO-based PET scanners it was offering with PET scanners incorporating the patented LSO crystals.

5. Siemens Medical’s LSO-based Biograph PET scanner was introduced in late 2002. The improved scintillation properties of the LSO crystal allowed Siemens Medical’s PET scanner to more efficiently use the radiation emitted from a patient and form much clearer images of the area of interest within that patient. Based on the LSO crystal’s improved scintillation properties and the resulting capabilities that Siemens Medical has been able to offer in its PET scanners, Siemens Medical’s Biograph PET scanners have enjoyed a reputation as being at the forefront of PET scanning technology and have enjoyed significant commercial success.

6. Since May 2004, the market for PET scanners has had three participants that account for nearly all sales: General Electric, Philips and Siemens Medical. Of these three, since the introduction of the original Biograph PET/CT, and particularly, the LSO-based Biograph, Siemens Medical has enjoyed a reputation as an innovator and the technology leader in the industry. This reputation and underlying technological edge has helped to account for Siemens

Medical's rising market share. In 2001, shortly after the Biograph PET/CT was first introduced, Siemens Medical had a market share of approximately [REDACTED]. Sales of the BGO-based Biograph PET/CT raised Siemens Medical's market share (excluding sales by CTI, which was at that point an independent company) to approximately [REDACTED] in fiscal year 2003, when Siemens Medical introduced its LSO-based Biograph PET/CT scanner. Sales of the improved LSO-based Biograph PET/CT again raised Siemens Medical's market share as described below.

7. On March 3, 2006 at the European Conference of Radiology, Philips announced that it would be releasing its Gemini TF PET/CT scanner, which incorporates LYSO crystals. Since Philips's announcement, Siemens Medical's market share has dropped dramatically. For the four quarters prior to the Philips announcement (Q3 of the 2005 fiscal year through Q2 of the 2006 fiscal year) Siemens Medical's market share for PET equipment (including PET/CT systems) based on bookings was [REDACTED]. For the four quarters after Philips's announcement (Q3 of the 2006 fiscal year to Q2 of the 2007 fiscal year), Siemens Medical's corresponding market share dropped to [REDACTED].

8. To calculate market share, I have relied on Siemens Medical's own sales data as well as data provided by the National Electrical Manufacturers Association (NEMA) regarding the sales for the entire market. The NEMA data is compiled using voluntarily disclosed sales data from GE, Philips and Siemens Medical.

9. Siemens Medical also tracks sales known to have been lost to each of its competitors, and attempts to ascertain from the customer the reason for the lost sale. The reasons for the lost sale are grouped into five categories: "price," "product" (which includes the technical

superiority or inferiority of Siemens Medical's scanners), "relationship," "performance" and "other." As shown in the table below, prior to the second quarter of 2006, when Philips commercially introduced the Gemini TF scanner, the vast majority of sales that Siemens Medical lost to Philips were due to the "price" or "relationship" factors. After the Gemini TF was introduced, the "product" factor, which includes the customer's perception of the relative technological merits of the scanners, was increasingly cited as the reason for Siemens Medical's losing the sale. In the latest quarter, "product" factors were the primary reason that Siemens Medical lost PET sales to Philips.

Table: Percentage of world-wide PET/CT scanner sales lost to Philips that are attributable to listed factors

Quarter (fiscal year)	Price	Product	Relationship	Performance	Other
Q2 2005 through Q1 2006	████	██	████	██	██
Q2 2006 through Q1 2007	████	████	████	██	██
Q2 2007	████	████	██	██	██

10. Siemens's loss reports can only be read as showing that Philips's introduction of the Gemini TF PET/CT scanner caused Siemens Medical to lose PET/CT sales and tainted Siemens Medical's reputation as the technological leader in this field. The only "product"-related factor for Philips's PET scanner offerings that changed between the first and second quarters of the 2006 fiscal year was Philips's announcement of the Gemini TF scanner with the

“time-of-flight” feature. In fact, Philips has marketed its Gemini TF scanner as the only commercial PET/CT scanner to offer a “time-of-flight” image reconstruction feature. I am aware of a number of sales that Siemens Medical has lost to Philips due to the fact that Philips was able to offer a scanner with this time-of-flight capability.

11. The time-of-flight feature involves calculating the time difference between the detection of a gamma ray photon by one scintillator crystal and the detection of another gamma ray photon by the diametrically-opposed scintillator crystal in order to determine the location from which the gamma ray was emitted more precisely, resulting in clearer images and minimizing the radiation dose to the patient. To offer this time-of-flight feature, however, Philips needed to change the scintillation crystal it used from the gadolinium orthosilicate (GSO) crystals used in its previous machines to the lutetium yttrium orthosilicate (LYSO) crystals used in the Gemini TF. The LYSO crystal (like the LSO crystal) has improved scintillation properties, in particular, decay time, which are essential to implementing a time-of-flight feature.

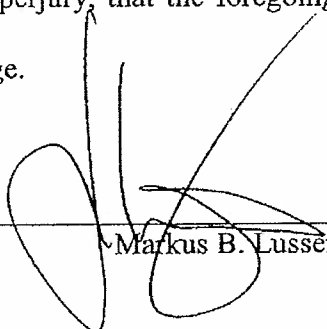
12. [REDACTED]

13. [REDACTED]

[REDACTED]

I hereby declare, under penalty of perjury, that the foregoing statements are true and correct to the best of my personal knowledge.

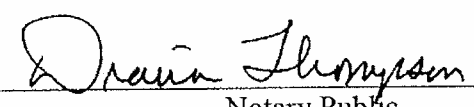
Date: July 9, 2007



Markus B. Lusser

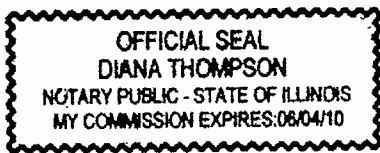
State of Illinois, County of Cook: SS

Subscribed and sworn before me, in my presence, this 9TH day of July, 2007.



Notary Public

My commission expires 6/04/2010.



CERTIFICATE OF SERVICE

I, the undersigned, hereby certify that on July 9, 2007, I electronically filed the foregoing with the Clerk of the Court using CM/ECF, which will send notification of such filing(s) to the following:

Jesse A. Finkelstein, Esquire
Jeffrey L. Moyer, Esquire
Kelly E. Farnan, Esquire
Richards, Layton & Finger, P.A.

I also certify that copies were caused to be served on July 9, 2007 upon the following in the manner indicated:

BY EMAIL & HAND

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New York, NY 10022

/s/ Jack B. Blumenfeld

Jack B. Blumenfeld (#1014)

CERTIFICATE OF SERVICE

I, the undersigned, hereby certify that on July 16, 2007, I electronically filed the foregoing with the Clerk of the Court using CM/ECF, which will send notification of such filing(s) to the following:

Jesse A. Finkelstein, Esquire
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Kelly E. Farnan, Esquire
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